## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

2002-323639

08.11.2002

(43) Date of publication of application:

(51)Int.CI.

G02B 6/32

(21)Application number: 2001-126842 (71)Applicant: NEC CORP

(22)Date of filing:

25.04.2001

(72)Inventor: YANO TAKASHI

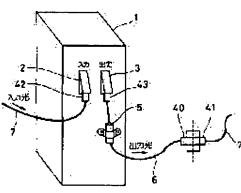
(54) PROTECTING UNIT FOR OPTICAL OUTPUT DEVICE, OPTICAL TRANSMISSION SYSTEM USING THE UNIT AND PROTECTING METHOD FOR OPTICAL OUTPUT DEVICE

## (57)Abstract:

PROBLEM TO BE SOLVED: To protect an optical output device from destruction due to fiber fuse phenomenon.

SOLUTION: To the output terminal 3 of a high output light amplifier 1 that outputs a high-level light beam to an optical fiber 7, there is attached in an externally replaceable form collimator-pair-containing patch cord 6 the collimator pair 5 in-between. In the case where burning takes place in the end face of the optical fiber 7 of an optical connector 41 and where the heat is conducted to the

collimator pair containing patch cord 6 connected to an optical connector 40, the heat energy is diffused at the collimator pair 5; therefore, fusion due to the fiber fuse phenomenon is unpropagated to the high-output light amplifier 1 to stop the fusion before the amplifier 1. As a result, the



high-output light amplifier 1 can be protected from the fiber fuse phenomenon, enabling the repair/maintenance of the optical transmission system easily at a low cost by merely exchanging the optical fiber 7 and the collimator pair-contained patch cord 6.

## LEGAL STATUS

[Date of request for examination]

19.03.2002

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office